

Amendments to the Specification

Please replace original Paragraph [00027] (page 6, lines 17 to 24) with the following new paragraph:

--The present invention is directed to a vision system, method and apparatus utilizing spatial oscillation. As illustrated in Figure 1, the system includes a primary detector array 12 having detector elements 14 sensitive to an input image signal 16, means 18 for inducing a spatial oscillation in the image 16 relative to the primary detector array 12, and a filter 20 for filtering out the image signal according to the spatio-temporal motion signature of the induced oscillation so as to extract those elements whose motions do not reflect the induced oscillation, therein removing detector-noise events to provide enhanced image quality and simplified post-processing. --

Please replace original Paragraph [00028] (page 6, line 25 to page 7, line 6) with the following new paragraph:

-- In an embodiment of the present invention, the induced oscillation means 18 is provided by a swept-frequency sinusoid chirp--22. In an embodiment of the present invention, the system further includes a secondary array 24 of opponent center/surround detectors 26 grouped by spatial orientation to provide multiple evenly-spaced orientations in the primary array 12 for receiving either positive or negative signal inputs at the center/surround detector's center, and receiving opposing input from primary detectors adjacent to a primary central detector, each center/surround detector fed by one or more detectors from the primary detector array, therein extracting improved de-noised, calibrated, contrast information and improved real-time spatial and velocity information.--

Please replace original Paragraph [00030] (page 7, lines 12 to 20) with the following new paragraph:

-- In an embodiment of the present invention, the spatial oscillation step is provided by a swept-frequency sinusoid chirp 104. In an embodiment of the present invention, the method further includes the step of receiving either positive or negative interpreted signal inputs at the center/surround detector's center, and receiving opposing input from primary detectors adjacent to a primary central detector, each center/surround detector fed by one or more detectors from the primary detector array, therein extracting improved de-noised, calibrated, contrast information and real-time, increased accuracy spatial and velocity information 106 . --